

CHLORINSITU® V 1D 100 – 500 g/h

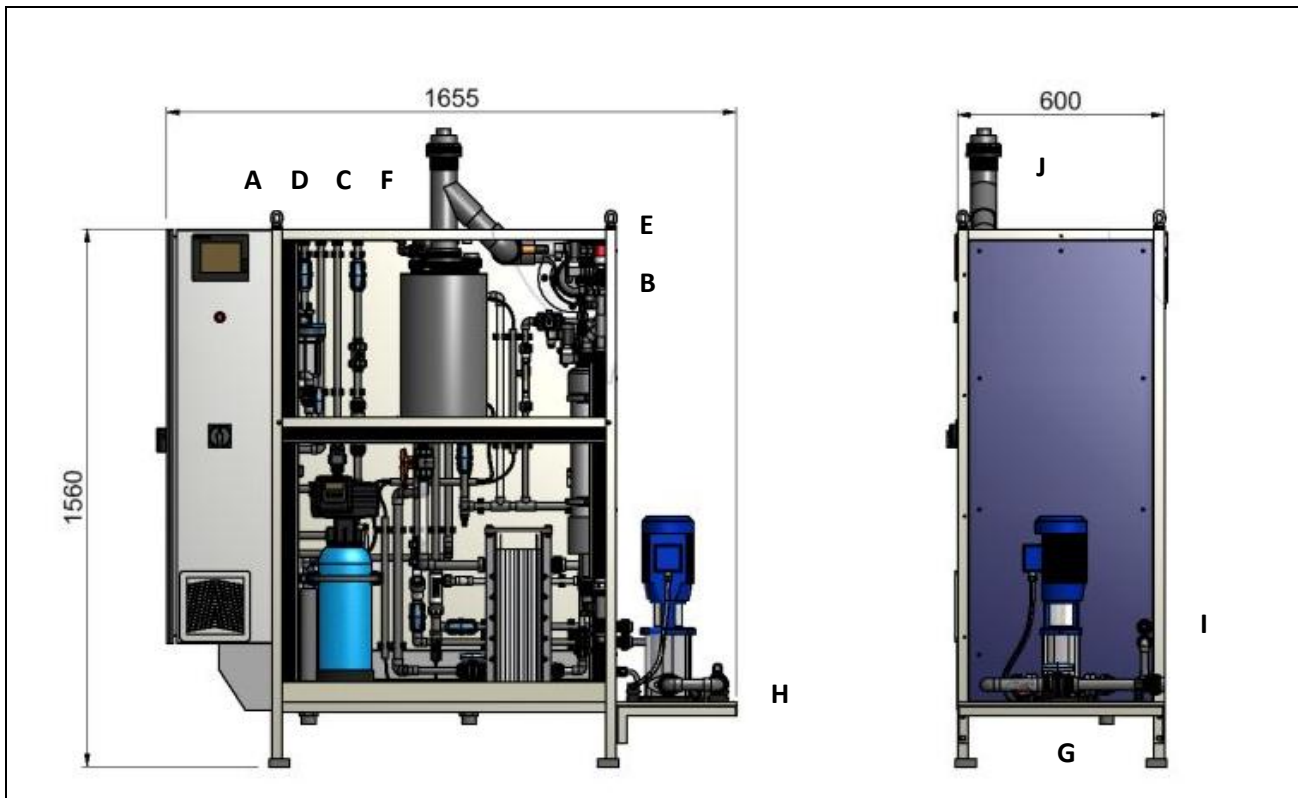
The CHLORINSITU® V 1D is especially designed for the production of chlorine with a minimum chloride and low chlorate content. The CHLORINSITU® V 1D product is used for disinfection of water in a broad variety of applications like swimming pools, cooling towers and potable water. Because the CHLORINSITU® V 1D is based on membrane technology the efficiency is high. The CHLORINSITU® V 1D produces a chlorine gas disinfectant without any superfluous products. Due to the fresh production the chlorine product is not subject to ageing.

Installation capacity (FAC production)	100 g/h 2,2 kg/day	200 g/h 4,4 kg/day	300 g/h 6,6 kg/day	400 g/h 8,8 kg/day	500 g/h 11 kg/day
Production capacity	22 h/day ¹				
Salt conversion	1,9 kg/kg FAC				
Energy consumption	4,0 kWh/ kg FAC				
FAC concentration ²	0, 5 - 1,0 g/l (0,05 - 0,1 %)				
pH product (approx.)	pH- correction possible with caustic				
Membrane cell type	HMC10-1	HMC10-2	HMC10-3	HMC10-4	HMC10-4
Water usage	60 l/h				
Capacity ATEX Blower	200 m ³ /h				
Power supply	3x400Vac ± 10%, N, PE, 50 Hz				
Nominal Energy use	1,65 kW	2,25 kW	2,85 kW	3,45 kW	4,05 kW
Installation fuse	3x16A				
Salt consumption	190 g/h 4,2 kg/day	380 g/h 8,4 kg/day	570 g/h 12,6 kg/day	760 g/h 16,8 kg/day	950 g/h 21,0 kg/day
Salt requirements	Salt preferable to EN16370 ³				
Maximum ambient humidity	85%				
Ambient Temperature	10 - 35 ⁰ C				
Ambient Conditions	Ambient air non condensating, non corrosive and dust free air within the installation room				
Brine tank	200 Liter (φ600x910mm)				
Relevant regulations	2006/42/EC, 2004/108/EC, 2006/95/EC, ATEX 95, IEC/ EN 60204-1, IEC/ EN 61000-6.1- 6.2				
Disinfection applications	Swimming pool, Cooling tower, Potable water (WRAS), Process water, Food & Beverage.				

¹ Based on the regeneration of the softener ones a day for 80 minutes.

² The product may vary depending on water quality, water volume, temperature, salt specification.

³ EN16370 Chemicals used for treatment of water intended for human consumption. Sodium chloride for onsite electrochlorination using membrane cells. Consult supplier when intended use of other types of generic salts.



	Connections to be made onsite	Installation side		Piping	Specifications	
		DN	d			
A	Water supply (drinking water quality)	DN15	d20 mm	PVCU	>2,5 bar(g)	Max. 15 ⁰ dH
		Return valve is needed in water supply.				
B	Brine supply membrane cell	DN15	d20 mm	d16, Nylon		
C	Brine supply softener	DN15	d20 mm	d10mm, PE		
D	Filling brine tank	DN15	d20 mm	PVCU		
E	Aeration	DN15	d20 mm	PVCU	Connet to the outside	
F	Caustic drain	DN15	d20 mm	PVCU		
G	Drain	DN32	d40 mm	PVCU		
H	Process water in	DN25	d32 mm	PVCU		
I	Process water out	DN15	d20 mm	PVCU		
J	Aeration blower according to ATEX 95	DN50	d63 mm	PVCU	Max. 10 meter, horizontal, vertical and/ or rising.	Max. 3 turns/ bends.
K	Drain brine tank	DN20	d25 mm	PVCU		
	Ethernet cable	Connect in the electrical cabinet				

CHLORINSITU® V 1D 600 – 1.750 g/h

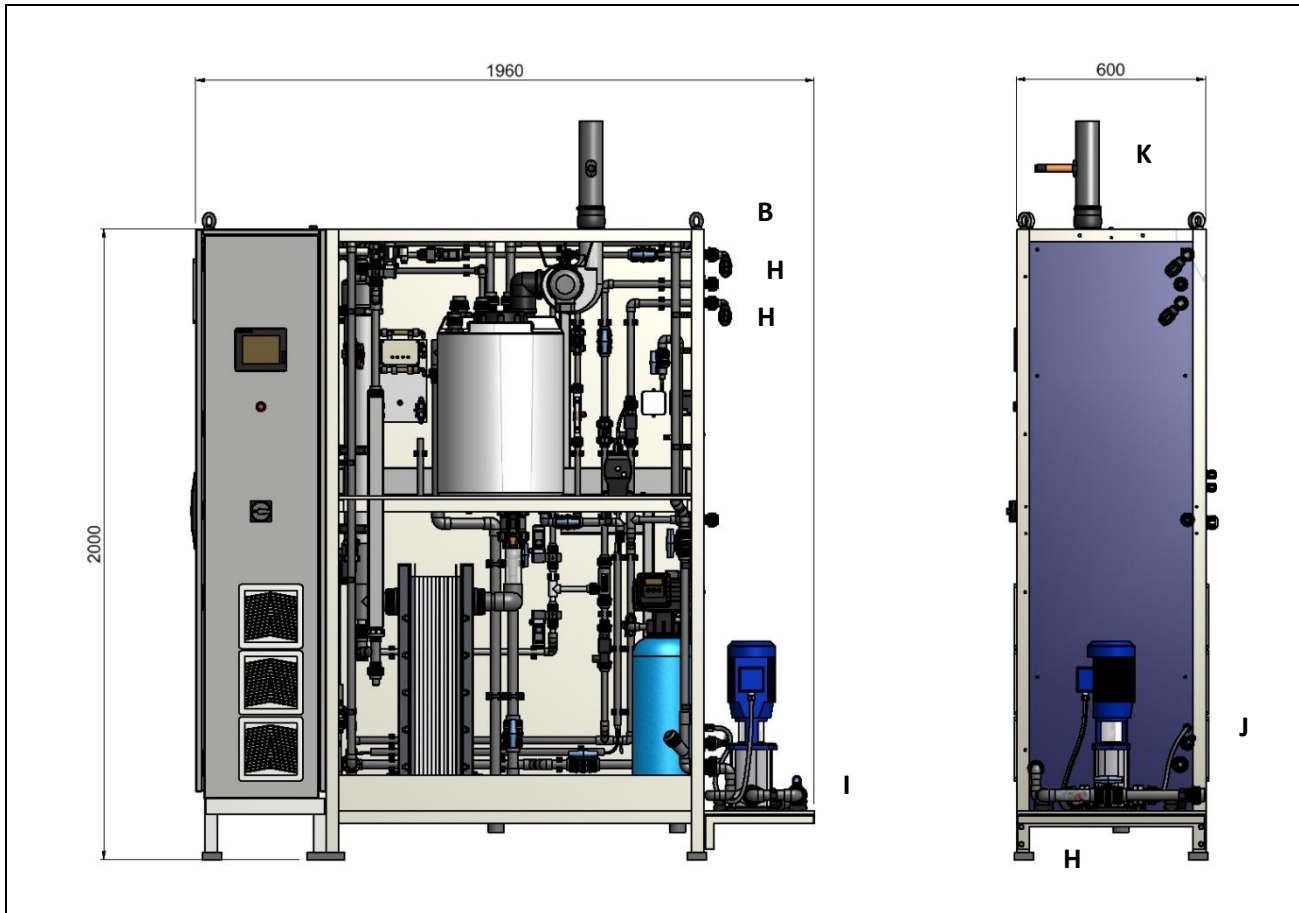
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Installation capacity (FAC production)	600 g/h 13.2 kg/day	750 g/h 16.5 kg/day	1.000 g/h 22 kg/day	1.250 g/h 25 kg/day	1.500 g/h 33 kg/day	1.750 g/h 38.5 kg/day
Production capacity	22 h/day ⁴					
Salt conversion	1,9 kg/kg FAC					
Energy consumption	4,0 kWh/kg FAC					
FAC concentration ⁵	0, 5 - 1,0 g/l (0,05 - 0,1 %)					
pH product (approx.)	pH- correction possible with caustic					
Membrane cell type	HMC25-2	HMC25-3	HMC25-4	HMC25-4	HMC25-5	HMC25-5
Water usage (approx.)	100 l/h					
Capacity ATEX Blower	200 m3/h					
Power supply	3x400Vac ± 10%, N, PE, 50 Hz					
Nominal Energy use	4,65 kW	5,55 kW	7,05 kW	8,55 kW	10,05 kW	11,55 kW
Installation fuse	3x20A	3x25A		3x30A	3x35A	
Salt consumption	1.140 g/h 25 kg/day	1.425 g/h 31,5 kg/day	1.900 g/h 42 kg/day	2.375 g/h 47,5 kg/day	2.850 g/h 62,5 kg/day	3.325 g/h 73 kg/day
Salt requirements	Salt preferable to EN16370 ⁶					
Max. ambient humidity	85%					
Ambient temperature	10 - 35 ⁰ C					
Ambient conditions	Ambient air non condensating, non corrosive and dust free air within the installation room					
Brine tank	380 Liter (Ø760x870 mm)					
Relevant regulations	IEC/ EN 2006/42/EC, 2004/108/EC, 2006/95/EC, ATEX 95, IEC/ EN 60204-1, IEC/ EN 61000-6.1- 6.2					
Disinfection applications	Swimmingpool, Cooling tower, Potable water (WRAS), Process water, Food & Beverage.					

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D	Filling brine tank	DN15	d20 mm	PVCU			
E	Aeration	DN15	d20 mm	PVCU	Connect to the outside		
F	Caustic drain	DN15	d20 mm	PVCU			
G	Drain	DN40	d50 mm	PVCU			
H	Process water in	DN20	d32 mm	PVCU	Max. length 30m	PN16	
I	Process water out	DN15	d20 mm	PVCU	Max. length 50m	PN16	
J	Aeration blower according to ATEX 95	DN65	d75 mm	d110mm, PVCU	Max. 10 meter, horizontal, vertical and/ or rising.	Max. 3 turns/ bends.	
K	Drain brine tank	DN20	d25 mm	PVCU			
	Ethernet cable	Connect in the electrical cabinet					